Pennsylvania Chesapeake Bay Watershed Action Plan Snapshot

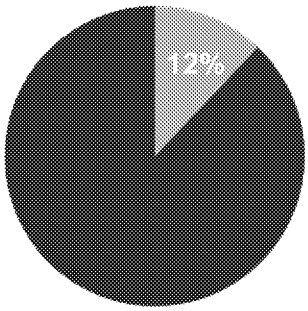
Pennsylvania's Progress and Goals for the Chesapeake Bay

Progress Since 1985

Pennsylvania has made significant progress in reducing both its Nitrogen and Phosphorous load to the Chesapeake Bay since 1985.

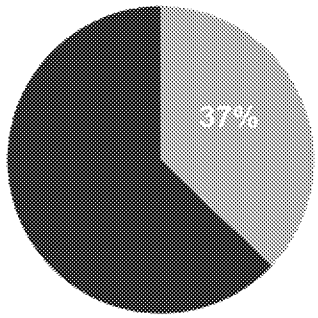
Loading rates in 2017 show 107.31 M lbs of Nitrogen annually, a reduction of 14.71 M lbs since 1985. Loading rates for Phosphorous show 3.80 M lbs annually, a reduction of 2.25 M lbs since 1985.

Nitrogen (N)
2017 Load (lbs):
107.31 M



1985 Load (lbs): 122.02 M
1985 – 2017 (lbs): 14.71 M

Phosphorus (P)
2017 Load (lbs):
3.80 M



1985 Load (lbs): 6.05 M
1985 – 2017 (lbs): 2.25 M

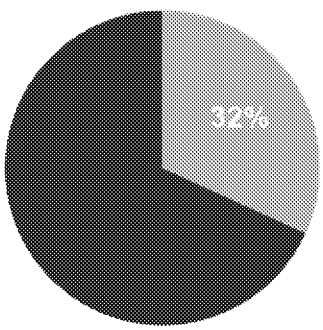
2017 Load (lbs)
1985 – 2017 (lbs)

2025 Reduction Goal

Pennsylvania needs to reduce its annual nutrient load for Nitrogen and Phosphorous by 2025.

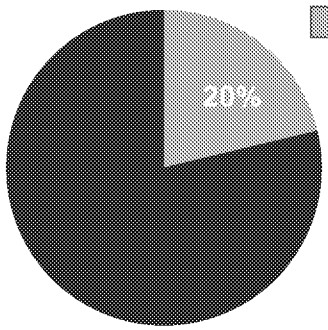
The current loading rate for Nitrogen is 107.31 M lbs. Pennsylvania needs to reduce its Nitrogen loading rate by 34.13 M lbs by 2025. The current loading rate for Phosphorous is 3.80 M lbs. Pennsylvania needs to reduce its Phosphorus loading rate by 0.756 M lbs by 2025.

Nitrogen (N)
Reduction Goal (lbs):
34.13 M



2017 Load (lbs): 107.31 M
2025 Goal (lbs): 73.18 M

Phosphorus (P)
Reduction Goal (lbs):
0.756 M



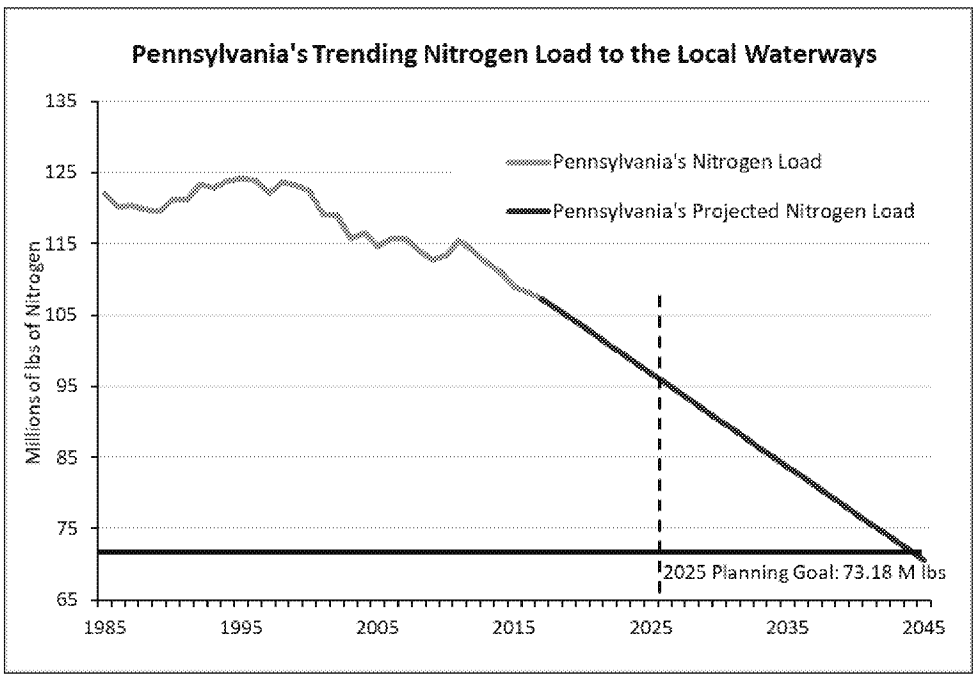
2017 Load (lbs): 3.80 M
2025 Goal (lbs): 3.044 M

2025 Goal (lbs)
Reduction Goal (lbs)

Existing Resources

If Pennsylvania was to continue with existing programs and resources, it would fall short of the 2025 planning goal by 23.63 M lbs of Nitrogen.

At the current reduction rate (calculated using the average reduction over the last five years), Pennsylvania would achieve its goal in 2044 (19 years beyond the 2025 planning goal).



**This snapshot represents progress toward PA's Chesapeake Bay nutrient reduction goals for load delivery to the Chesapeake Bay. To reach these goals, higher in-state nutrient reduction goals are needed. See the PA's Progress and Goals for its Local Waterways snapshot for progress towards those numbers.*

Reductions From State WIP Workgroup Recommendations

Pennsylvania's state workgroups have identified key strategies to reducing the current Nitrogen and Phosphorus load. The workgroups recommendations can be found in the Phase 3 WIP and on the Phase 3 WIP website.

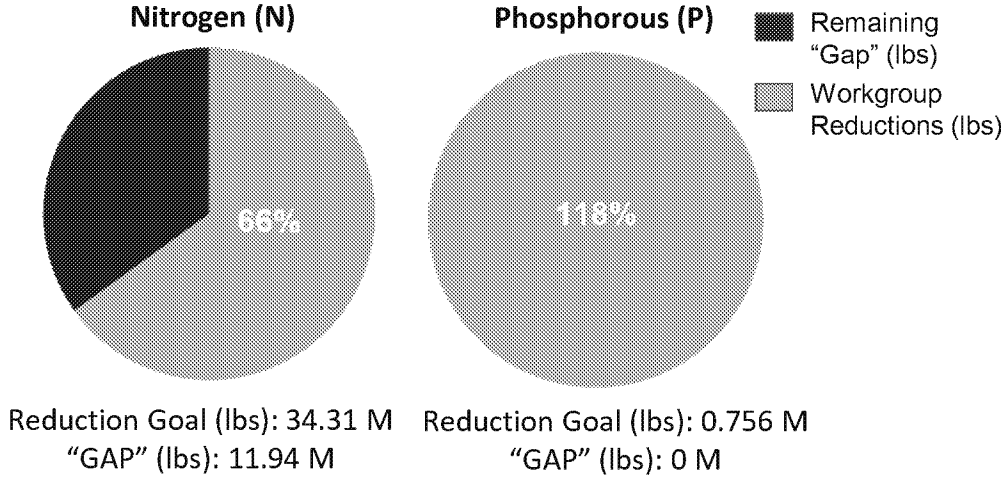
The state WIP workgroups are made up of representatives from each of the sectors. Real world experience, costs and obstacles were used to develop the recommendations, estimate resource needs and predict costs.

Workgroup	Nitrogen (lbs.)	Phosphorous (lbs.)	Cost ($)
Agriculture^	19,260,000 (56%)	760,000 (101%)	$313,140,000
Forestry	5,151,000 (15%)	427,000 (56%)	$67,701,000
Stormwater*	195,000 (1%)	14,000 (2%)	$78,552,000

***Recommendations do not include 2023 Permit Cycle**
^Reductions do not contain forest buffers: the Forestry scenario contains the Agriculture forest buffers

Total Reduction Progress

The statewide reductions are not simply the sum of the reductions from the three workgroup scenarios above. Reductions from the workgroup recommendations represent isolated suites of BMPs, whereas the statewide reductions take into account the interaction between all BMPs across the three workgroup recommendations.



Total	22,371,000 (66%)	893,000 (118%)	$459,393,000

Merging the Pennsylvania Chesapeake Bay Watershed-Wide Nutrient Reductions with Pennsylvania Countywide Action Plans

The above reductions account for the entire Pennsylvania Bay Watershed and do not account for individual county progress. Watershed-wide runs cannot account for variation in Countywide Action Plans.

The variation in Countywide Action Plans and nutrient reductions can be found in the *County Planning and Progress* document, which shows the progress of PA's four pilot counties after the completion of their WIP planning process, and the progress of the statewide workgroup recommendations in the remaining 39 counties.

The statewide workgroup recommendations serve as a starting point for counties as they complete their individual planning processes. Once a county's planning process is completed, its progress will be updated to reflect the results of its planning process.

Learn More and Get Involved

To get involved with or learn more about Pennsylvania's WIP planning process, please visit: https://bit.ly/2RE7Dzb

Clean water: Great for PA Good for the Bay